

**REMARKS**

Reconsideration and withdrawal of the rejections set forth in the Office action mailed March 27, 2006 are respectfully requested in view of the amendments and arguments presented herein. This Amendment is timely filed.

**I. Status of the Claims**

Claims 105-108 and 131-188 are pending in the application.

Claims 1-104 and 109-130 are withdrawn.

Claims 105, 106, and 108 are amended.

Claim 107 is as originally-presented.

Claims 131-188 are new.

**II. Amendments****A. Amendments to the Specification**

The specification has been amended on page 53, line 19, to correct the Roman numeral designation for the preceding structure. Support for this amendment is found in the specification on page 18, line 5.

**B. Amendments to the Claims**

The claims have been amended to more particularly recite the features of the present invention. Support for the amendments contained herein is provided below.

Claim 105 has been amended to delete extraneous language and for consistency with the specification. Specifically, the term “biologically active agent” has been simplified to “active agent” in view of the definition provided on page 25, beginning on line 22. The scope of “active agent” has also been clarified by introducing the feature of an active agent containing either a reactive thiol or amino group. Support for this feature is found on page 17, lines 14-22; page 18, lines 1-9; and on page 53, lines 1-3. Claim 105 has also been amended to incorporate the features of claim 1, now withdrawn. Further, claim 105 has been amended to reflect a linker comprising at least 4 contiguous saturated carbon atoms. Support for this feature is found in the specification on page 5, lines 10-13, and on page 30, lines 3-5.

Claims 106 and 108 have been amended for consistency with the amendments to claim 105, as described above. Support for the term “residue” is found in the specification at page 27, lines 6-9.

Claims 131 and 132 are directed to conjugates of certain active agents. Support for these claims is found in the specification at page 58, lines 17-20.

Support for new claims 133-188 is found in the corresponding polymer claims, now withdrawn. Structures have been modified from the corresponding polymer claims to reflect the corresponding conjugate. Further support for such conjugates is found in the specification at page 17, lines 11-13.

Support for the values of p and q in Claim 182 is found in the specification at page 33, lines 9-11.

No new matter has been added to the claims by virtue of the amendments presented herein.

### **III. Rejections Under 35 U.S.C. §112, Second Paragraph**

The Examiner has rejected claims 105-108 under 35 U.S.C. §112, second paragraph. It is the Examiner’s assertion that the claims are indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, it is the Examiner’s position that the scope of “biologically active agent” cannot be determined. This rejection is respectfully traversed for the following reasons.

As set forth under 35 U.S.C. §112, second paragraph, the claims must particularly point out and distinctly claim the subject matter that Applicants regard as their invention. The primary purpose of this requirement is to ensure that the scope of the claims is clearly understandable to the public.

In an effort to even more particularly recite the features of the invention, the independent claims have been amended to reflect a conjugate formed by reaction of an active agent comprising either a reactive thiol or amino group with a subject polymer of the invention. The term “biologically” preceding “active agent” has been deleted, since such language is considered redundant in view of the definition of active agent provided in the specification at page 25, lines 22-27. It is submitted that one skilled in the art, when examining the claims under consideration, would clearly understand that the claims encompass any active agent comprising a reactive amino or thiol group, covalently attached to the recited polymer structure. A definition of the

term, "active agent" is provided in the specification as discussed above. Moreover, examples of illustrative active agents in accordance with the invention are provided on page 58, line 4 through page 62, line 2. In view of the content of the instant specification, coupled with the teachings of the prior art regarding polymer conjugates such as those presently claimed, it is submitted that the instant claims meet the threshold requirements of clarity and precision and define the claimed subject matter with a *reasonable* degree of particularity and distinctness, as set forth in detail in the MPEP, Section 2173.02.

Thus, it is submitted that the instant claims comply with the requirements for definiteness under 35 U.S.C. §112, second paragraph. In view of the foregoing, Applicant respectfully requests that the Examiner's rejection of the claims under 35 U.S.C. §112, second paragraph, be withdrawn.

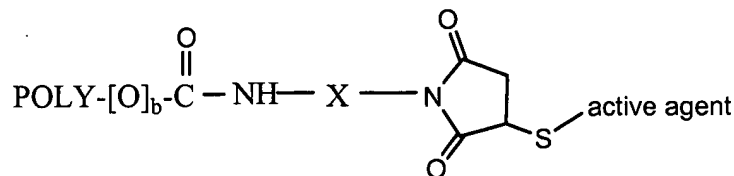
#### IV. Rejections Under 35 U.S.C. §102

The Examiner has rejected claims 105-108 under 35 U.S.C. §102(a) as being unpatentable over Yamasaki (WO 03/000278). In particular, the Examiner has pointed to polymers described on pages 80 and 91 of Yamasaki.

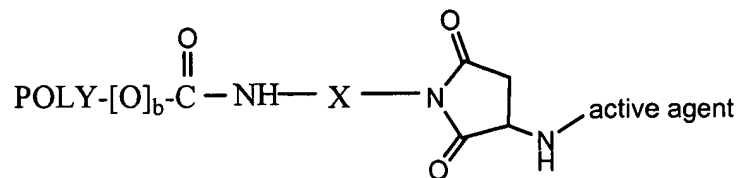
It is submitted that this rejection has been overcome in view of the amendments to the claims and the remarks which follow.

##### A. THE CLAIMED INVENTION

The invention as presently claimed is directed to conjugates of hydrolytically-stable maleimide-terminated water soluble polymers having a particular structural configuration. Generally speaking, the conjugates possess the following structural features:



or



where

POLY is a water-soluble polymer segment,

b is 0 or 1,

X is a hydrolytically stable linker comprising at least 4 contiguous saturated carbon atoms,

"POLY-[O]<sub>b</sub>-C(O)-NH-X-" is absent aromatic groups and ester linkages,

"-S-active agent" represents an active agent comprising a thiol (-SH) group, and

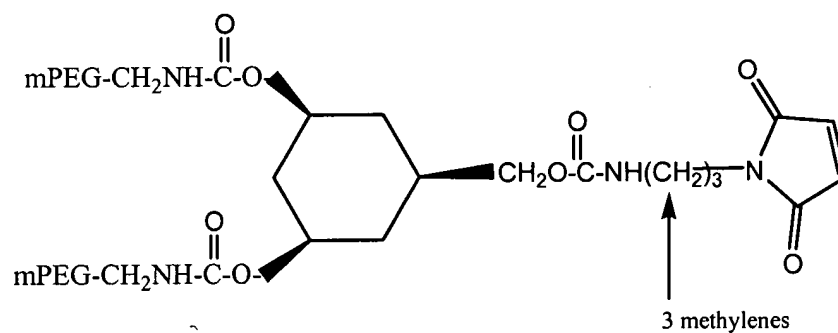
"-NH-active agent" represents an active agent comprising an amino group.

## B. THE CITED ART

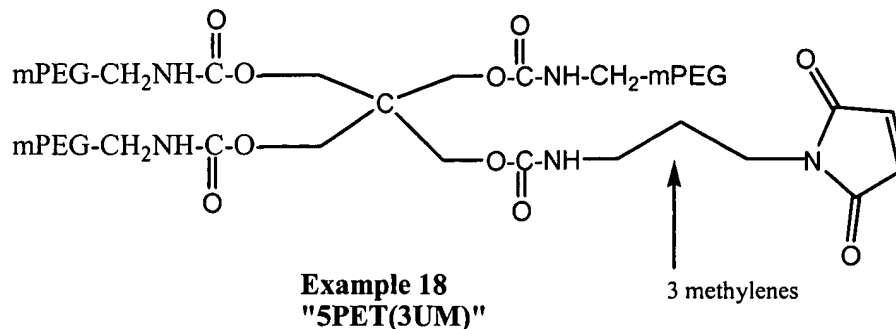
Yamasaki, M. et al., is directed to ointments containing physiologically active polypeptides modified with at least one polyalkylene glycol.

An IDS is submitted herewith, reciting and also accompanied by an English translation of Yamasaki.

Structures of the polymers relied upon by the Examiner are reproduced below.



**Example 9**  
**"5CHTM(2UM)"**



Conjugates of the above polymer maleimides are also described.

### C. ANALYSIS

The standard for anticipation is as follows:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference". *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In examining the structures of Yamasaki against the instant claims, it can be seen that the Yamasaki structures do not contain each and every element of the Applicant's claims. That is to say, the structures of Yamasaki are in no way identical to structures encompassed by the claims of the present invention. Specifically, the branched Yamasaki structures both contain 3 methylenes interposed between the maleimidyl nitrogen and the carbamate nitrogen. In contrast, the instant claims require that X is a hydrolytically stable linker *comprising at least 4 contiguous saturated carbon atoms*. Neither of the subject Yamasaki structures, 5CHTM(UM) nor 5PET(3UU), contain 4 contiguous saturated carbon atoms between the maleimidyl nitrogen and the carbamate nitrogen. Thus, Yamasaki fails to anticipate the claimed invention.

In view of the foregoing, it is submitted that the Examiner's rejection of the claims under 35 U.S.C. §102(a) has been overcome.

### V. Conclusion

In view of the foregoing, the Applicant submits that the claims pending in the application patentably define over the cited art, and are therefore in condition for allowance. The prompt mailing of a Notice of Allowance is therefore earnestly solicited.

If a telephone conference would expedite the prosecution of the subject application, the Examiner is requested to call the undersigned at (650) 493-3400.

Respectfully submitted,

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